# ZEPHIER'S VIDEO & GAS

## PINE RIDGE INDIAN RESERVATION KYLE, SOUTH DAKOTA

March 2009



#### **ACCOMPLISHMENTS**

- Removed 1 UST and ancillary equipment
- · Conducted Tier I and II site assessments
- Installed 11 MWs
- · Groundwater monitoring
- Conducted AS/SVE pilot study
- Evaluated feasibility of AS/SVE system as remedial strategy
- Designed AS/SVE system



EPA Region 8 performed this work in partnership with the Oglala Sioux Tribe and with contract support from Avanti Corporation.

### PLANNED ACTIVITIES/ FUTURE STRATEGIES

- Install and operate AS/SVE system
- Groundwater monitoring

#### SITE HISTORY

In 1998, EPA determined that Mr. Harvey Zephier was eligible for the leaking underground storage tank (LUST) Trust Fund. One 1,000-gallon gasoline underground storage tank (UST) and associated equipment was removed from the site in October 1998. The removed UST was found to be in poor condition and contained multiple holes. Soil sample analysis indicated benzene and total petroleum hydrocarbons as gasoline at elevated concentrations. Seven monitoring wells (MWs) were installed. Groundwater samples indicated high levels of BTEX contamination within the excavation area of the former UST and east of the excavation area. In March 2002, BTEX contamination was detected in wells east of the original UST pit. Three additional MWs were installed prior to the sampling event that occurred in October 2004. In 2008, one MW was installed to determine if contamination was migrating off-site. Results from the site assessment indicated that petroleum hydrocarbons present in the groundwater were limited to the vicinity of the former UST pit. An AS/SVE pilot study was designed and performed. Design work on a full-scale AS/SVE system began based on results of the pilot study.







